

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (ORIGINAL), or (not entered).

Please amend claim 45 and add claims 46 and 47 in accordance with the following:

1. (Previously Presented) A copy protection method to prevent unauthorized copying of digital data during digital data transmission between a sender and a receiver, comprising:

encrypting a first region of a text containing a second encryption key using a first encryption key;

encrypting a second region of the text using the second encryption key;

transmitting a cipher text comprising the encrypted first and second regions;

transmitting the first encryption key, region segmentation information for segmenting the text into the first region and the second region, and information related to the second encryption key;

decrypting the first region of the transmitted cipher text using the transmitted first encryption key and the transmitted region segmentation information;

extracting the second encryption key from the decrypted first region using the transmitted information related to the second encryption key; and

decrypting the second region of the transmitted cipher text using the extracted second encryption key.

2. (Cancelled)

3. (Original) The copy protection method according to claim 1, wherein the first encryption key comprises an encryption key for use with a common key encryption method.

4. (Original) The copy protection method according to claim 1, wherein the first encryption key comprises a public key for use with a public key encryption method.

5. (Original) The copy protection method according to claim 1, wherein the second encryption key is smaller than the first encryption key where a common key encryption method is used.

6. (Original) The copy protection method according to claim 1, wherein a size of the first encryption key is fixed, and a size of the second encryption key is varied by a transmission unit within the first region.

7. (Previously Presented) The copy protection method according to claim 1, wherein the information related to the second encryption key includes size and position information of the second encryption key.

8. (Original) The copy protection method according to claim 7, wherein the position and size information of the second encryption key are fixed.

9. (Original) The copy protection method according to claim 7, wherein the position and size information of the second encryption key are varied.

10. (Previously Presented) The copy protection method according to claim 1, wherein the first region of the text is smaller than the second region of the text.

11. (Previously Presented) The copy protection method according to claim 1, wherein the region segmentation information comprises information on a starting address of the second region of the text.

12. (Cancelled)

13. (Previously Presented) A copy protection method for decrypting a cipher text received from a sender who encrypts a first region of a text containing a second encryption key information using a first encryption key, encrypts a second region of the text using a second encryption key based upon the second encryption key information, and transmits the cipher text, the first encryption key, region segmentation information, and the second encryption key information to a receiver, comprising:

decrypting the first region of the cipher text using the transmitted first encryption key and the transmitted region segmentation information;

extracting the second encryption key from the decrypted first region using the transmitted second encryption key information; and

decrypting the second region of the text using the extracted second encryption key.

14. (Original) The copy protection method according to claim 13, wherein a size of the first encryption key is fixed, and a size of the second encryption key is varied according to a transmission unit within the first region.

15. (Original) The copy protection method according to claim 13, wherein the first region of the text is smaller than the second region of the text, and a size of the first encryption key is larger than a size of the second encryption key.

16. (Previously Presented) The copy protection method according to claim 1, wherein the region segmentation information comprises information on a size of the first region of the text.

17. (Previously Presented) The copy protection method according to claim 3, wherein the first encryption key comprises an encryption key that is 56 bits or more.

18. (Previously Presented) A computer readable medium encoded with processing instructions for implementing a method of encrypting a text sent between a sender and a receiver performed by a computer, the method comprising:

encrypting a first region of the text using a first encryption key, where the first region contains a second encryption key;

encrypting a second region of the text using the second encryption key;

transmitting the first encryption key and region segmentation information for segmenting the text into the first region and the second region;

decrypting the first region of the text using the first encryption key and the transmitted region segmentation information;

extracting the second encryption key from the decrypted first region; and

decrypting the second region of the text using the extracted second encryption key.

19. (Cancelled)

20. (Previously Presented) The computer readable medium according to claim 18, wherein the first encryption key comprises a symmetric key having 56 bits or more.

21. (Previously Presented) The computer readable medium according to claim 18, wherein the first encryption key comprises an asymmetric key for use with an asymmetric key encryption method.

22. (Original) The computer readable medium according to claim 18, wherein the second encryption key is smaller than the first encryption key.

23. (Original) The computer readable medium according to claim 18, wherein a size of the first encryption key is fixed, and a size of the second encryption key is varied by a transmission unit within the first region.

24. (Previously Presented) The computer readable medium according to claim 18, wherein the information related to the second encryption key includes size and position information of the second encryption key.

25. (Original) The computer readable medium according to claim 24, wherein the position and size information of the second encryption key are fixed.

26. (Original) The computer readable medium according to claim 24, wherein the position and size information of the second encryption key are varied.

27. (Previously Presented) The computer readable medium according to claim 18, wherein the first region is smaller than the second region.

28. (Previously Presented) The computer readable medium according to claim 24, further comprising sending information on a starting address of the second region through a safe transmission path.

29. (Previously Presented) The computer readable medium according to claim 28, further comprising
sending a cipher text comprising the encrypted first and second regions through an unsafe transmission path; and
obtaining the safe transmission path through authentication operations.

30. (Previously Presented) A computer readable medium encoded with processing instructions for implementing a method of decrypting an encrypted text sent between a sender and a receiver performed by a computer, the method comprising:
decrypting a first region of the encrypted text using a first encryption key, where the first region contains a second encryption key;
decrypting a second region of the encrypted text using the second encryption key;
decrypting the first region using region segmentation information; and
extracting the second encryption key from the decrypted first region using information related to the second encryption key.

31. (Cancelled)

32. (Previously Presented) The computer readable medium according to claim 30, wherein the region segmentation information, the information related to the second key, and the first encryption key are received through a safe transmission path.

33. (Original) The computer readable medium according to claim 32, further comprising receiving the encrypted text through an unsafe transmission path.

34. (Original) The computer readable medium according to claim 30, wherein a size of the first encryption key is fixed, and a size of the second encryption key is varied according to a transmission unit within the first region.

35. (Previously Presented) The computer readable medium according to claim 30, wherein the first region of the encrypted text is smaller than the second region of the encrypted text, and a size of the first encryption key is larger than a size of the second encryption key.

36-40. (Cancelled)

41. (Previously Presented) A receiver for receiving encrypted text, comprising:

an authenticator to obtain a safe transmission path through which a first encryption key, region segmentation information, and information related to a second encryption key are received, and

a decryptor to decrypt a portion of the encrypted text using the first encryption key and the region segmentation information, to extract the second encryption key from the decrypted portion using the information related to the second encryption key, and to decrypt another portion of the encrypted text using the second encryption key.

42. (Original) The receiver of claim 41, wherein
the information related to the second encryption key comprises size and position information of the second encryption key, and
the encrypted text is received through an unsafe transmission path.

43. (Previously Presented) The receiver of claim 42, wherein the receiver comprises an information appliance.

44. (Previously Presented) The receiver of claim 42, wherein the receiver comprises a computer.

45. (Currently Amended) The receiver of claim 42, wherein the receiver comprises a hardware server.

46. (New) A copy protection method to prevent unauthorized copying of digital data during digital data transmission between a sender and a receiver, comprising:

encrypting a first region of a text using a first encryption key, the first region of text including data to be extracted as a second encryption key;

encrypting a second region of the text using the second encryption key;

transmitting a cipher text comprising the encrypted first and second regions;

transmitting the first encryption key, region segmentation information for segmenting the text into the first region and the second region, and information related to the second encryption key;

decrypting the first region of the transmitted cipher text using the transmitted first encryption key and the transmitted region segmentation information;

extracting the second encryption key from the decrypted first region using the transmitted information related to the second encryption key; and

decrypting the second region of the transmitted cipher text using the extracted second encryption key.

47. (New) A copy protection method to prevent unauthorized copying of digital data during digital data transmission between a sender and a receiver, comprising:

encrypting a first region of a text, as a first encryption key, after a second encryption key is extracted from the first region of the text;

encrypting a second region of the text using the second encryption key;

transmitting a cipher text comprising the encrypted first and second regions;

transmitting the first encryption key, region segmentation information for segmenting the text into the first region and the second region, and information related to the second encryption key;

decrypting the first region of the transmitted cipher text using the transmitted first encryption key and the transmitted region segmentation information;

extracting the second encryption key from the decrypted first region using the transmitted information related to the second encryption key; and

decrypting the second region of the transmitted cipher text using the extracted second encryption key.